

PROGRAM UPDATE

by Dave Leland

As always, there is a lot of activity in the Department of Human Services and in the drinking water program. See the other articles in this issue about water system security, emergency planning, and the new EPA database.

Current State Budget

As you know, the Legislature met in a record number of special sessions this past year to deal with general fund revenue shortfalls for the current 2001-03 biennium. The drinking water program budget was not specifically reduced during this process, however, the program did take about \$35,000 in reductions from across-the-board administrative cuts imposed during March and May. In September, the Department suspended planned cuts of \$121M, pending the outcome of the income tax surcharge measure on January 28. If the measure fails, the cuts will reduce a number of DHS programs, services, and positions. The drinking water program is not among those planned reductions.

2003 Legislature - Water Supplier Connection Fee

The Legislature convenes its regular session in January and begins work on the 2003-05 budget. The Department proposes a significant budget increase for the drinking water program to address specific recommendations of the 2001 Secretary of State Audit Report. Our current program staffing and resources are about half that needed to fully carry out the EPA drinking water standards here in Oregon, an arrangement known as Primacy. An additional \$1.4M in federal EPA funds from the Safe Drinking Water Revolving Loan Fund is available to support our drinking water Primacy program. The catch is that a nearly dollar-for-dollar match in state funds is required to access these federal funds. In our case, that means we need an additional \$1.1M in state matching funds during 2003-05. The Department proposes to

(Continued on page 7)

SAFE DRINKING WATER INFORMATION SYSTEM (SDWIS-STATE) UPDATE

by Mary Alvey

We have made significant progress in converting to the SDWIS-State data management system. You can see the results by selecting "Data Online" from our website at: <http://www.ohd.hr.or.state.us/dwp>.

Now is the time for you to check the sample points we have identified for your water system. After selecting Data Online, you will be asked for the water system name or identification number. By typing in your PWS ID or name you can find specific information on your water system. Under basic "water system information" you will find a listing of the entry points and sources of water for your water system. In most cases each entry point has been designated as a sample point. Each sample point will be assigned a chemical monitoring schedule. Compliance with monitoring requirements will be determined using those sample points and schedules. If you have changed the configuration of your system, added or eliminated a source, we need to know or monitoring violations could be generated as a result.

Coliform sample schedules can be checked now and chemical schedules will soon be available for each sample point. This will enable you to keep track of

(Continued on page 6)

INSIDE THIS ISSUE:

Funding Security Projects	2
Emergency Response Plans	2
Sheldon Ridge Fire	4
Sumpter	4
Labs Getting Certified under ORELAP	5
New Radionuclides Rule	5
Certified Operators	6
Training Calendar	8

FUNDING SECURITY PROJECTS THROUGH THE STATE REVOLVING LOAN FUND

by Chris L. Hughes

Due to the events of 9/11, the security of public water systems is a high priority at the federal level and at the State level as well. Vulnerability assessments are now required for all community water systems serving a population of more than 3,300, and emergency response plans are required for all public water systems in Oregon according to new administrative rules currently being adopted. Completion of the vulnerability assessment and emergency response plan may indicate projects to reduce security risks and which will require financing to complete.

The Safe Drinking Water Revolving Loan Fund is available to fund security projects through two funds: the Source Water Protection Loan Fund and the Safe Drinking Water Revolving Loan Fund (called the Infrastructure Loan Fund for the purposes of this article). All community and non-profit non-community public water systems are eligible to submit Letters of Interest.

The Source Water Protection Loan Fund is available to fund security projects at drinking water sources such as wells, springs, or surface water intake structures. A Letter of Interest may be submitted at any time for evaluation, and projects are awarded on a first-come first-serve basis after the funding application is approved by Oregon Economic & Community Development Department (Note: A Letter of Interest is not an application and submitting a Letter of Interest for evaluation does not mean an application must be submitted.). The maximum loan amount is \$100,000 per water system per year, so a source security project costing \$200,000 would take two years to fund.

The Infrastructure Loan Fund is available to fund security projects at high-risk structures such as water treatment plants, storage tanks, and pump stations. The Infrastructure Loan Fund can also be used to fund vulnerability assessments and the work on emergency response plans. A Letter of Interest may be submitted for evaluation during the annual federal application phase (February – May), and those projects at the top of the project priority list are invited to apply for funding by Oregon Economic &

EMERGENCY RESPONSE PLANS FOR PUBLIC WATER SYSTEMS

by Chris L. Hughes

Because of the heightened awareness of terrorism here in the United States, the federal government has identified and given high priority status to components of critical infrastructure- those systems that maintain the way of life for all Americans. The components identified as critical infrastructure are systems that must be preserved and are potentially the most at risk from terrorist acts since they will have the greatest effect on the American way of life. Safe drinking water is one of the systems identified as critical infrastructure and a high priority has been placed on protection of public water systems and drinking water sources at the federal level. To reduce risk, public water systems are now required to develop or update emergency response plans, and the larger community water systems are also required to conduct vulnerability assessments and incorporate the results into their emergency response plans.

A vulnerability assessment is a determination or an estimation of the degree to which a water system or water source is or can be adversely affected under different types of emergency situations. An emergency response plan is a written document establishing contacts, operating procedures, and actions taken for a public water system to minimize the impact or potential impact of a natural disaster, accident, or intentional act which disrupts or damages, or potentially disrupts or potentially damages the public water system or drinking water supply, and returns the public water system to normal operating condition.

The *Public Health Security and Bioterrorism Preparedness and Response Act of 2002* (H.R. 3448) was passed by Congress and signed by President Bush. This Act established requirements for vulnerability assessments and emergency response plans for community water systems serving a population of more than 3,300. The Environmental Protection Agency is required to develop baseline information on vulnerability assessments for these water systems, and guidance to community water systems serving less than a population of 3,300 on how to conduct vulnerability assessments. This Act also established deadlines for completion of the vulnerability assessments followed by emergency response plans six months later.

FUNDING (continued from page 2)

Community Development Department. The maximum loan amount is \$4,000,000 per project with higher amounts available with approval from the Drinking Water Advisory Committee.

Those community and non-profit non-community public water systems that already have projects on the project priority list, have application approval from Oregon Economic & Community Development Department, or are under project construction, may increase the funding to include security at all or a part of the water system. This is accomplished with a contract amendment and approval from Oregon Economic & Community Development Department.

The types of security projects for public water systems will vary depending on the needs and security risks identified. The installations of gates, fences, locks, security cameras, alarms, etc., are all security projects and valid uses of the two funds. It is the responsibility of the public water systems to identify the major security risks and determine which security project(s) will reduce the security risks the most economically. Guidance will be available at the federal level for determining risks for public water systems in the coming months.

For more information on funding public water system security projects or other types of projects through the State Revolving Loan Fund, contact Dave Phelps at (503) 731-4010.

Chris Hughes, PE, is Manager of the Protection & Development Unit of the Drinking Water Program / (503) 731-4317 or christopher.l.hughes@state.or.us

EMERGENCY (continued from page 2)

Because of the high priority placed on critical infrastructure such as public drinking water supplies and systems, the Drinking Water Program has developed Administrative Rules requiring written emergency response plans for all public water systems to be completed on a schedule which agrees with H.R.3448. The Oregon Administrative Rule *Emergency Response Plan and Water System Operations Manual* (OAR 333-061-0064) becomes effective October 25, 2002. The definitions for "Emergency Response Plan" and "Water System Operations Manual" can be found in *Definitions* (OAR 333-061-0020). The written emer-

gency response plan must be completed according to the following schedule:

<u>Public Water System Population</u>	<u>Date Due</u>
100,000 or more	September 30, 2003
50,000 or more but less than 100,000	June 30, 2004
More than 3,300 but less than 50,000	December 31, 2004
3,300 or less	June 30, 2005

Linn County has created a template and basic guidance for developing emergency response plans. Public water systems can use this template to develop or update their own emergency response plans according to the above dates. The counties are mailing out packets containing this template to their water systems, and the template will also be placed on the Drinking Water Program website.

The emergency response plan template is divided into five sections: communications & authority; water system security; water system hazard review; emergency equipment & water supplies; and emergency response procedures. The Administrative Rule requires these five sections in the emergency response plan.

The Oregon Association of Water Utilities is sponsoring a series of workshops on security and emergency response planning for public water systems. The workshops have already taken place in Bay City (April, 2002), Prineville (June, 2002), Sherwood (August, 2002), Ontario (October 2002) and Coquille (November 19). Grants Pass is scheduled for February 13, 2003.

The EPA is working on guidance for small public water systems on conducting vulnerability assessments and developing emergency response plans. Additional security workshops may be added in 2003 to incorporate some of this new information when it becomes available. For more information on these workshops, contact the Oregon Association of Water Utilities at (503) 873-8353.

If you need assistance with your emergency response plan and your water system received an emergency response plan packet from the county, contact your County Health Department. All other public water systems needing assistance with their emergency response plans can contact the Drinking Water Program.

Chris Hughes, PE, is Manager of the Protection & Development Unit of the Drinking Water Program / (503) 731-4317 or christopher.l.hughes@state.or.us

SHELDON RIDGE FIRE - THE DALLES, OR

by Brian R. Stahl

Start with a simple lightning strike, add gusting Columbia River gorge winds, and mix with a generous heap of tinder dry rural/urban forest interface and you have a combination for disaster.

The Sheldon Ridge Fire here in The Dalles, Oregon grew from 20 acres to 200 acres to over 5,000 acres in two days. The progression and speed with which this fire grew clearly demonstrated the importance of emergency planning and inter-agency communication and coordination.



When the word was received of the original lightning strike on Tuesday July 23, 2002, the City had personnel stationed at the Oregon Department of Forestry Incident Command center to provide input. Through this presence the City was able to directly communicate concerns and provide information related to the Wicks Water Treatment Plant, its operation and hazardous material present directly in-line with the fire. Equipped with this knowledge, emergency personnel could make decisions on fighting the fire knowing that the City had prepared emergency response plans to evacuate personnel and hazardous materials, if necessary.

Given the progression of the fire, the Incident Commander gave direction on Thursday to evacuate the plant as well as move all hazardous material out of the path of the fire. The Process Safety Management Program for the Wicks facility has a section specifically prepared for 'Response to Over-Land Wildfire'.

Because of the plan, a seamless response for loading, securing, transporting and storing the four one-ton cylinders of chlorine occurred. By following the plan, personnel were able to focus on the emergency at hand in a well thought out, directed manner.

The happy ending to this story is that the fire was stopped and contained at the road leading into the drainage where the treatment plant is located. The facility was back on line within 72 hours of shutdown. The coordination with emergency personnel solidified the close relationships established over the years. And the emergency planning, so painstakingly done over the years, paid big dividends in providing the backbone of our response to this emergency. Will this happen again...you can bet your life on it, but we're prepared!

Brian R. Stahl, Director, Department of Public Works / (541) 296-5401 ext. 2008 or brian_stahl@ci.the-dalles.or.us

SUMPTER COMPLETES SLOW SAND FILTER PROJECT

by Gary Burnett

The construction of a slow sand filter for the City of Sumpter was completed in August. An administrative order was issued in January, 1992, for violation of the original Surface Water Treatment Rule (SWTR). The City constructed slow sand filters in the 1970's at the McCully Fork watershed, but the system could not consistently meet the filtration requirements for several reasons. The 2 filter cells could not be independently drained for scraping, so the water supply



Slow Sand Filter Plant, Sumpter Oregon
August 13, 2002

(Continued on page 5)

LABS GETTING CERTIFIED UNDER ORELAP, QUALITY IS UP!

by Irene Ronning

At the September Drinking Water Advisory Committee meeting, I distributed a list of labs that are certified in Oregon for drinking water under the current drinking water laboratory certification standards, and a list of labs are accredited under the new Oregon Environmental Laboratory Accreditation Program (ORELAP).

ORELAP labs are approved to test for many environmental programs including drinking water. When labs become ORELAP approved, they drop off the drinking water certified list and go on ORELAP accredited list. The quality assurance / quality control standards are stricter to be ORELAP accredited. At some point in the future, the drinking water lab certification will end and ORELAP will be the sole means for evaluating labs.

I have been preparing very few lab updates of late where accreditation or certification has been downgraded for anything. This is because the laboratories' performance has improved now that more and more of them are meeting the National Environmental Laboratory Accreditation Conference (NELAC) standards used under ORELAP.

I remember that years ago some labs could not pass 80% of the required Performance Testings (PT) for the 20 regulated VOCs. Most of these labs are now reporting hundreds of PT results for VOCs and rarely failing any. I know that when PT study reports come in I mark the failed tests with highlighter and I am not getting much use of my highlighter lately.

Just within the past week, a commercial lab Quality Assurance Officer told me that they feel that they are a better lab because of ORELAP, and that they have increased confidence in their ability. It's good to hear that all the work done by everyone in the lab business to implement the NELAC standards in Oregon appears to be paying off.

Questions? Call me at 503-229-5505.

Irene E. Ronning, is ORELAP Administrator of the Oregon State Public Health Laboratory / (503) 229-5505 or irene.e.ronning@state.or.us

NEW RADIONUCLIDES RULE: WANT TO SAVE MONEY ON MONITORING?

By Kari Salis

Sampling now will save you over \$1,000!

The new Radionuclides rule applies to all Community systems. If you sample each entry point once for Gross-Alpha, Radium-226 & -228, and Uranium between December 8, 2000 and December 8, 2003, this data will count as initial monitoring. Otherwise, you will have to do 4 consecutive quarters of sampling beginning in 2005. Future sampling frequency will be every 3, 6, or 9 years depending on initial results.

Kari Salis, PE, is in the Technical Services Unit of the Drinking Water Program / (503) 731-4317 or karyl.l.salis@state.or.us

SUMPTER (continued from page 4)

was not filtered during cleaning events. Also, the filter site is difficult to access in the winter time, so the filters had to be taken off line due to freezing or maintenance problems. In addition, the City has water rights for two other surface sources, but since they are located downstream from the McCully Fork filters, they could not be used.

The total project cost was \$2.25 million, and includes a 300,000 gallon reservoir near the filter plant, a 75,000 gallon high level storage tank, and distribution system improvements. The new, 3 cell, 3,600 square foot slow sand filter is located on City owned property above town near the original 100,000 gallon wood tank. Design capacity is 240,000 gallons per day. Funding was provided by USDA Rural Utilities Service, and included a \$1.3 million grant and \$805,000 loan. OECD also contributed a \$103,000 grant to the project. The estimated average monthly residential user rate is \$35.40, divided between property taxes and water use rates.

The consulting engineer is HGE, Inc., and the general contractor is Michael Becker.

Gary Burnett, PE, is Manager of the Eastern Oregon Technical Services Unit of the Drinking Water Program / (541) 276-8006 or gary.f.burnett@state.or.us

CERTIFIED OPERATORS

by Deb Weatherford

Yearly Renewals Sent (Levels 1-4)

Yearly renewals have been mailed. Those operators with last names beginning A-K must report 2.0 Continuing Education Units this year. Be sure to read your renewal; make any changes in address, phone numbers, and/or place of employment; and sign it before mailing it to us. Due date for fees and CEUs (when needed) is December 31, 2002. A late fee of \$10 will be added to certification fees for all renewals mailed to us between January 1, 2003 and March 31, 2003. Beginning April 1, 2003, that late fee changes to a reinstatement fee of \$50 in addition to certification fees.

Still need CEUs? Uncertain whether the class you took will count toward your renewal? Check out the website: www.oesac.com. This website lists courses which qualify for drinking water certification renewals. There is also a list for wastewater certification renewals. Added this year to the website are home study courses which can be done over the Internet.

Exams (Levels 1-4)

Certification exams are held the 3rd Thursday in May and October. The deadline for receipt of applications is the 1st day of the preceding month (April 1 and September 1). Why the deadline? We must order exams 30 days before we need them to arrive. Why do early applicants get phone calls from us when their application has obvious missing information? (Answer: There is time to do so.) We expect the May exam to be huge, so **get your application in extra early!** And be sure to double-check it before you put it in the mail!

New Rule (OIT)

The new rule did away with the Operator In Training designation, so OITs will not be receiving renewals this year. OITs need to send in a new Affidavit of Employment when experience equals one full year at 100% in the area of certification desired (i.e. treatment or distribution).

Small Groundwater "S" designation

The free water system operator trainings have been completed for 2002. If your small groundwater operator has not yet been certified, you need to hire a certified operator until your operator attends the training and becomes certified. Training will resume in February of 2003. The Water System Operator Training Schedule is on our website at: www.ohd.hr.state.or.us/dwp.

Deb Weatherford is in the Operator Certification Program of the Monitoring & Compliance Unit of the Drinking Water Program / (503) 731-4899 or deborah.a.weatherford@state.or.us

SDWIS (continued from page 1)

monitoring requirements for your water system. It will also allow us to customize and track schedules which deviate from the standard. Be sure to write the specific sample location on your lab reports.

You can now see most chemical testing you have reported for 2002. We have nearly caught up with the backlog of chemical reports and are working on radiological and Lead/Copper. Early next year we will install the latest version of this software designed by EPA which will allow us to implement the

new surface water treatment and disinfection by-products regulations.

New queries have been added to the Online options to better assist our staff in remote offices. It has eliminated the need to print and mail monthly paper reports. We continue to add new features to the Online system and welcome your suggestions.

Mary Alvey, RS, is Unit Manager of the Monitoring & Compliance Unit of the Drinking Water Program / (503) 731-4381 or mary.b.alvey@state.or.us

UPDATE (continued from page 1)

raise the required state match through a periodic connection fee paid by public water suppliers. If the fee were assessed only to the 900 community water suppliers, the rate would be \$1.20 per connection every two years. This funds an additional 14 positions in the drinking water program, bringing our total level of effort to about 60% of what is needed to fully carry out our Primacy responsibilities. We will then be in a position to argue the case for additional federal funds for additional federal workload. If approved by the Legislature, the fee would begin in January, 2004.

Safe Drinking Water Revolving Loan Fund Nears the \$100M Mark!

The Department recently applied for the seventh annual capitalization grant from USEPA for the loan fund. Once awarded, the Oregon loan fund will have received a total of nearly \$100M. Since program startup in 1997, the Oregon fund has awarded loans

to 40 communities in the total amount of \$62.3M (see photo below of ultraviolet light disinfection unit constructed by Springfield Utility Board at the 9 MGD Willamette Well Field). Many more communities are in process of applying for safe drinking water project loans. Keep those projects coming!

Operator Certification for Small Groundwater Systems

As reported earlier, EPA formally approved the Oregon Operator Certification framework in May, 2002. The 2001 Legislature authorized one new position to work specifically with certification of operators of small groundwater systems, formerly exempt from certification. This position was held vacant until recently, while the Department of Human Services implemented a new organization. In October, Ron Hall took that position, rejoining the drinking water program after heading the Environmental Services program which is responsible for food protection, spas/pools, lead paint, clandestine drug labs, environmental toxicology, and other environmental health functions. Ron is now preparing the EPA Operator Certification grant application. After grant approval and award, we will contract for training material synthesis and preparation, and then contract for delivery of that training to small water system operators.

Office of Public Health Systems Transition

The Office of Public Health Systems (OPHS) contains public and environmental health programs of DHS-Health Services. These include drinking water, radiation protection, emergency medical services, health care licensure, and environmental services. Tom Johnson, who served as Office Administrator for 12 years, departed during the summer. Grant Higginson, State Public Health Officer, is serving as Acting Office Administrator, pending recruitment for that position.

Stay tuned!

Dave Leland, PE, is Manager of the Drinking Water Program / (503) 731-4010 or david.e.leland@state.or.us



Ultraviolet Light Disinfection Units Installed at the Springfield Utility Board Willamette River Well Field, 2,000 gpm each.



Slow Sand Filters at Springfield Utility Board's Willamette Well Field



Department of Human Services
 Drinking Water Program
 P.O. Box 14450
 Portland OR 97293-0450

PERIODICALS
 POSTAGE
PAID
 PORTLAND, OR.

TRAINING CALENDAR

Cross Connection/Backflow Courses

Clackamas Community College (C)
 (503) 657-6958 ext. 2388

Backflow Assembly Tester Recertification

Feb. 20-21 Oregon City (C)

Water System Training Course

Department of Human Services
 Marsha Fox/(503) 731-4899

Feb. * Linn & Benton Counties

Mar. * Marion County

* dates and exact locations to be announced

PIPELINE is published quarterly free of charge by the staff of the Department of Human Services, Drinking Water Section, 800 NE Oregon St., Portland OR 97232, Phone (503) 731-4010. Periodicals postage paid at Portland OR.
 POSTMASTER: Send address changes to PIPELINE, P.O. Box 14450, Portland OR 97293-0450.
 ISSN: 1072-4028

PIPELINE is intended to provide useful information on technology, training, and regulatory and policy issues to those involved with the state's public water systems to improve the quality of drinking water in Oregon. PIPELINE may be copied or reproduced without permission provided credit is given.